

EXHIBIT E

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC, <div style="text-align: center;">Plaintiff,</div> v. GOOGLE LLC,, <div style="text-align: center;">Defendant.</div>	§ § § § § § § § § § §	Civil Action No. 1:19-cv-12551-FDS JURY TRIAL DEMANDED
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PLAINTIFF’S FIRST REQUEST FOR EMAIL PRODUCTION

Pursuant to Section 3 of the parties’ Stipulated Order Regarding Discovery of Electronically Stored Information (Dkt. 68), Plaintiff, Singular Computing LLC, requests that Defendant, Google LLC, produce all non-privileged emails created or received between January 1, 2008 and December 20, 2019, for the following custodians and responsive to the search terms set forth below:^{1 2}

1. **Astro Teller:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid

¹ As used herein, an exclamation mark (!) shall function as a “wildcard” character, to truncate a term so as to include all words made by adding letters to the end of the term. For instance, in the above, the term “cost!” shall include at least the following terms: “cost,” “costs,” “costly,” “costlessly,” etc. Similarly, the term “accumulat!” shall include at least the following terms: “accumulate,” “accumulates,” “accumulator,” “accumulators,” etc. Should Defendant use a different character (i.e., not an exclamation mark) to perform the above-described “wildcard” function, it shall so specify and use that character to conduct its searches.

² These search terms shall not be deemed case-sensitive. Responsive documents shall not be limited to the capitalization that appears in the terms set forth herein. For example, the term “Tensor Processing Unit” shall include at least the following case-variations: “tensor processing unit,” “Tensor Processing unit,” etc. Similarly, the term “Mac Truck” shall include at least the following case variations: “mac truck,” “Mac truck” or “mac Truck.”

2. **Obi Felton:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid
3. **Jeff Dean:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid
4. **Norman Jouppi:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid
5. **Nan Boden:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid
6. **Quoc Le:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid
7. **James Laudon:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid
8. **Andrew Phelps:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid
9. **Nishant Patil:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR

Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid

10. **Peter Brandt:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid

11. **Andrew Ng:** (1) Singular OR Bates OR Joe; (2) bfloat16 OR bF16 OR “Brain Float” OR brainfloat; (3) “TPU” OR “Tensor Processing Unit”; (6) (approximate OR precision) AND (arithmetic OR float! OR multipl! OR accumulat! OR matrix); (7) Jellyfish OR Jellydonut OR “JF”; (8) “Mac Truck” OR Mactruck OR “MT”; (9) SeaStar OR “Sea Star”; (10) Squid

Dated: October 20, 2020

By: /s/ Paul J. Hayes

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ATTORNEYS FOR THE PLAINTIFF

CERTIFICATE OF SERVICE

I certify that on October 20, 2020, I served this document on Defendant by causing a copy to be sent via electronic mail to its counsel of record.

/s/ Paul J. Hayes